

May 2008

Master of Science in Nutrition Central Washington University

Introduction

Central Washington University (CWU) seeks approval to establish a Master of Science in Nutrition degree program to replace an existing Nutrition specialization within CWU's Master of Science in Family and Consumer Sciences degree. The new program would be moved from the Department of Family and Consumer Sciences to the Department of Health, Human Performance, and Nutrition (HHPN), as part of an administrative restructuring. Both departments are housed within CWU's College of Education and Professional Studies.

Beginning in fall 2008, the proposed program would enroll five FTE students,¹ part- and full-time at Ellensburg, and it is projected to remain at that enrollment level. It would prepare students for further graduate study or careers in business or government, including careers as nutritional specialists, dietitians and consultants. The required coursework for the proposed program would be the same as the required coursework for the existing Nutrition specialization.

Relationship to Institutional Role and Mission and the Strategic Master Plan for Higher Education

The proposed program supports CWU's mission to prepare students for responsible citizenship, responsible stewardship of the earth, and enlightened and productive lives by producing graduates capable of research and practice that promotes public health. For example, graduates may work in a clinical setting with clients who require special nutritional assistance in the form of enteral or parenteral nutrition. The program would support the *Strategic Master Plan for Higher Education* by expanding access to postsecondary degrees in a health-related science field with potential to increase economic prosperity, innovation, and opportunity in the state.

¹ Enrollment in the existing Nutrition specialization has varied from 4-6 FTE over the last 5 years, consisting primarily of full-time students.

Diversity

In addition to supporting university-wide diversity initiatives, HHPN would support diversity at the department level by:

- Maintaining professional memberships for two faculty members in the organization Latinos and Hispanics in Dietetics and Nutrition (LAHIDAN), an American Dietetic Association networking group whose mission includes advancing food and nutrition practice and public policy, and supporting leadership development and recognition;
- Continually improving Spanish speaking skills of two faculty;
- Continuing faculty participation in ConneX, a health career pipeline sponsored by the Yakima Farm Workers Clinic;
- Continuing a relationship with Universidad Latina De America in Morelia, Mexico and pursuing study opportunities for students there;
- Conducting and presenting research opportunities designed to support and encourage a diverse perspective or to address issues in diverse settings or with diverse populations²;
- Offering a \$1,000 undergraduate scholarship targeted at under-represented groups, which would tend to increase diversity within the proposed program because CWU undergraduates would be the chief source of applicants for the proposed program;
- Publicizing the program via student and professor visibility during cooperative field experiences or internships at public health facilities that serve diverse populations, such as the Yakima Farm Workers Clinic and Yakima neighborhood health centers;
- Including members from underrepresented groups on all faculty search committees; and
- Reviewing best practices for identifying potential hires from under-represented groups at the beginning of every faculty or staff search.

Program Need

The proposed program would respond to the needs of students, employers, and community stakeholders, and would not unnecessarily duplicate existing programs in the state.

In existence as a specialization for about 20 years, the program has been enrolled at full capacity for at least the last four years. The Dietetic Internship (DI) program at CWU ensures a steady stream of applicants. In addition, students who earn the degree will be better positioned to serve the community, in part, because a Master of Science in Nutrition carries more weight with employers than a Master of Science in Family and Consumer Science with Specialization in Nutrition.

Graduates of the program would be qualified for positions in nutrition and dietetics not open to those with only a bachelor's degree. Although the department has not kept survey records of graduates, it has anecdotal evidence that graduates are gainfully employed in the field. In addition, the Employment Security Department, projects an 18 percent increase in total dietitians and nutritionists in Washington State during 2004-2014, with average annual openings for 51 positions.

² This year, HHPN hired a tenure-track faculty member with research experience in this area.

The program meets specific community needs in Central Washington. Students training in the program frequently integrate with community coalitions and agencies to address nutrition-related problems. For example, students in the current Nutrition specialization have conducted collaborative research with the Yakima Farmworkers' Clinic on improving clinical parameters related to people who have diabetes.

Although three other universities³ in the state offer master's level nutrition degrees, the proposed program at CWU would be the only one offered in the state's central region.

Program Description

The program would prepare students for further graduate study as specialists in nutrition or as professionals in, or consultants to, business, industry, and government. It is targeted primarily at students who have completed the Dietetic Internship (DI) program at CWU and want to become registered dietitians. In the Dietetic Internship program, students complete up to 23 credits that may be applied to the 45 credits required for the proposed program. The DI program is accredited by the Commission on Accreditation for Dietetics Education (CADE); however, there is no specialized accreditation for master's programs.

To be admitted, students would be required to have completed at least three courses in chemistry, including general chemistry, organic chemistry, and biochemistry; as well as courses in cell biology, microbiology, and human physiology. In addition, an entering student would need to have taken nutritional biochemistry, medical nutrition therapy, and an introductory statistics course. Students would need to have achieved a minimum 3.0 grade point average in their last 90 quarter credits and would have to submit Graduate Record Examination (GRE) results, which would be used in conjunction with transcripts and recommendation letters to make admission decisions.

Once admitted, each student would develop a program in consultation with a faculty advisor and the Graduate Committee. The program would be subject to approval by the department chair, and would include 26 credits of core courses and 19 credits of approved electives in fields such as exercise science, health education, biology, psychology, and education. Although students could elect a thesis or non-thesis option, they would be encouraged to complete a thesis.⁴ The program would be taught by full-time, tenure-track faculty.

Students in the program would be able to:

- Apply evidence-based guidelines, systematic reviews and scientific literature in the nutrition care process;
- Demonstrate professional attributes such as attending a state, regional, or national conference, and skills such as writing/preparing professional communications;

³ Bastyr University, University of Washington, and Washington State University each offer master's level nutrition degrees.

⁴ In the existing Nutrition specialization, only one student has done a non-thesis option in the last 20 years.

- Develop and demonstrate effective communications skills using oral, print, and visual formats; and
- Prepare and analyze quality of data and develop a plan for intervention.

To determine how well students have mastered the learning outcomes, course-level assessments have been identified and aligned with the program-level learning outcomes listed above.

Assessment methods would include: essay testing, presentations, curriculum development, group projects, case studies, research projects, and peer evaluations. In addition, students would complete a thesis and would be assessed during that process by their advisor and graduate committee.

Program assessment would include student evaluation of instruction surveys to provide feedback about the effectiveness of courses, as well as a DI assessment survey. In addition, a survey would be administered to graduates about a year after they have completed the proposed program. Survey results would be used to form decisions about updating curricula or techniques, and a nutrition advisory board would meet twice a year to provide feedback to help the department evaluate the need for changes in curriculum. Finally, the program would be part of CWU's cyclic program evaluation process, which occurs every five years and includes a self-study and a site visit. HHPN would undergo cyclic evaluation during the 2008-09 academic year.

Program Costs

The proposed program would enroll five FTE students in the first year and would remain at that level. To implement the program, the Department of Biology has budgeted 0.03 FTE for administrative staff and 0.27 FTE for faculty. The time budgeted for administrative staff and faculty is low because many of the courses are offered already as part of the summer session DI program. The proposed program would use existing office space and library resources, so the budget excludes those items. It would be funded by an internal reallocation of funds.

At full enrollment of 5 FTE, the total cost of instruction would be \$27,300, or \$5,460 per FTE. This is on the low end of the range of average cost per FTE for graduate students majoring in sciences at comprehensive institutions. According to the HECB's *2005-06 Education Cost Study (July 2007)*, the direct cost of instruction per average annual sciences graduate student FTE at comprehensive institutions ranged from \$4,794 at Eastern Washington University to \$8,985 at Western Washington University, and was \$8,890 at Central Washington University.

External Review

Two external reviewers reviewed the program: Dr. Barbara Bruemmer, Senior Lecturer, Department of Epidemiology, and Director, Didactic Program in Dietetics, Graduate Program in Nutritional Sciences, University of Washington School of Public Health; and Ms. Maureen McCarthy, Interim Director, Dietetics and Nutrition, Oregon Health and Science University.

Both reviewers supported the proposal, and neither voiced any concerns about it or made any recommendations for improvement. McCarthy's review was extremely brief, noting that the required coursework seemed appropriate for the degree.

Bruemmer's review was much more substantial. Bruemmer highly recommended the proposed changes to the current structure (e.g. changing from a Nutrition specialization within Family and Consumer Science to a Master of Sciences in Nutrition). Bruemmer also noted that the existing CWU program has served a strong role as a balance between the Urban Research Center at UW and the agricultural school at WSU. In addition, Bruemmer noted that graduates of the existing program demonstrate strong competencies, reflecting the strengths of their education and training. Furthermore, Bruemmer noted, the UW's Nutritional Sciences program recently completed a total revision of its curriculum, based on surveys of students, alumni, employers, faculty, and university partners; and then trends identified in the surveys were mirrored in the proposed program's balance of basic and applied science.

Staff Analysis

The proposed program is essentially an administrative restructuring that would change the name of an existing program and the administrative unit housing it.

The proposed program would be consistent with *Strategic Master Plan for Higher Education* and CWU's role and mission. It would respond to student need by continuing to provide students with an opportunity for graduate-level nutrition study in the Central Washington region, while offering them a degree title that would more clearly convey the focus of their studies than the existing title does. It would help the state cope with increasing employer demand for dietitians and nutritionists, and it would benefit community organizations in Central Washington.

External review indicated the proposed program's curriculum was appropriate and consistent with current trends. It further indicated that existing specialization program graduates demonstrated strong competencies reflecting the strengths of their education and training.

The program would be taught entirely by full-time tenure-track faculty, and features well-designed student and program assessments.

Based on the observations above, HECB staff concludes that the program would benefit students, employers, and the community without unnecessarily duplicating existing programs, and it would be offered at a reasonable cost.

Staff Recommendation

After careful review of the proposal and supporting materials, staff recommends approval of the Master of Science in Nutrition program at Central Washington University. The HECB Education Committee discussed the proposal during its May 5, 2008 meeting and recommended approval by the full Board.

RESOLUTION 08-13

WHEREAS, Central Washington University proposes to offer a Master of Science in Nutrition;
and

WHEREAS, The program represents an administrative restructuring that would change the name of
an existing program and the administrative unit housing it without changing the coursework; and

WHEREAS, The program would respond to student need by providing students with an
opportunity for graduate-level nutrition study in the Central Washington region, while offering
them a degree title that conveys the focus of their studies more clearly than the existing title does;
and

WHEREAS, The program would respond to employer and community need by helping the state
cope with increasing demand for nutritionists and by engaging students in research that benefits
local community organizations; and

WHEREAS, The program would be taught by full-time tenure-track faculty; and it would feature
well-designed student assessments; and

WHEREAS, External review indicates that the proposed program's curriculum would be
appropriate and would be consistent with current trends;

THEREFORE, BE IT RESOLVED, that the Higher Education Coordinating Board approves the
Master of Science in Nutrition at Central Washington University, effective May 22, 2008.

Adopted:

May 22, 2008

Attest:

Bill Grinstein, Chair

Roberta Greene, Secretary